

REMARKS

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 112, are respectfully requested in light of the following remarks.

Claims 16-30 are pending in the application. Claim 1-15 were previously cancelled.

Claim 16 has been amended to replace "With" with "with" and to delete the word "further" before proviso. The word further is deleted because it implies that there is a proviso before this proviso and an earlier proviso is not present.

No new matter has been added in making these amendments.

Rejection under 35 U.S.C. §103

1. Claims 16-18 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Fujita et al. (US 3,755,249)

Applicants respectfully submit that these claims are not obvious over Fujita, and that claims 16-18 are allowable.

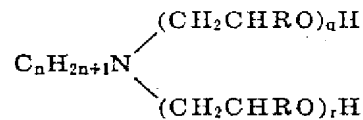
To establish a *prima facie* case of obviousness, three basic criteria must be met. (MPEP 2143) First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Fujita teaches polyamide compositions comprising a polyamide containing an anti-static agent composed of a polyalkene oxide-added secondary alkylamine of the formula:



in which R stands for a hydrogen atom or methyl radical,
 n stands for a positive integer of not less than 10, and
 p stands for a positive integer, preferably a positive integer not less than 10,

and a polyalkene oxide-added tertiary alkylamine of the formula:



in which R and n have the same definitions as given above, and q and r are each a positive integer, preferably $(q + r)$ is a positive integer not less than 15, the mol number of the added polyalkylene oxide groups equalling $(q + r)$,
 i. the above positive integers, n , p , q , and r satisfying the relationship below;

2.5, preferably $2.0 \geq (p+q+r)/2n \geq 0.5$, preferably 0.8, i.e., $(p+q+r)/2n$ is between 0.5 and 2.5 and ii. the secondary alkylamine of (A) above occupying 5 – 50 percent by weight, preferably 15 – 35 percent by weight, of the total of (A) plus (B), and the total of (A) + (B) occupying 1 – 15 percent by weight, preferably 1.5 – 7 percent by weight, of the polyamide.

Fujita also teaches: "The concurrent utilization of the two types of polyalkylene oxide-added alkylamines (A) and (B) as below-specified is essential for the polyamide compositions of this invention." (col. 4, lines 13-16)

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. There is no suggestion or motivation in Fujita to modify Fujita to obtain the methods of the applicants' invention. There is no suggestion or motivation in Fujita to modify Fujita by replacing an additive comprising the specific secondary alkylamines and the specific tertiary amines as an additive with a poly(oxyalkylene)amide or a polymeric matrix comprising poly(oxyalkylene)units, as required by the instant claims. There is no suggestion or motivation in Fujita to modify the process to feed the filaments into a pneumatic attenuation device in which the filaments can adhere to the wall of the attenuation device or to other filaments. Therefore, there is no suggestion or motivation, either in the cited reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference to obtain the invention of the instant application.

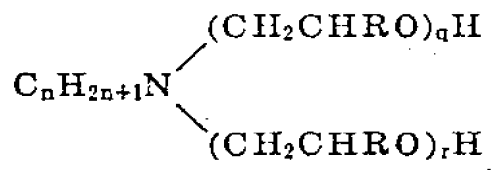
To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. Fujita teaches: "The concurrent utilization of the two types of polyalkylene oxide-added alkylamines (A) and (B) as below-specified is essential for the polyamide compositions of this invention." (Emphasis added) The Office Action is silent on the expectation of success in replacing the combination of the specific secondary alkylamines and the specific tertiary amines as an additive with a poly(oxyalkylene)amide or a polymeric matrix comprising poly(oxyalkylene)units, as required by the instant claims. The Office Action is also silent on the expectation of success in modifying Fujita by not requiring the two types of polyalkylene oxide-added alkylamines (A) and (B) that are essential for the polyamide compositions of Fujita. One of ordinary skill in the art would recognize that there must be some teaching regarding the replacement or substitution of elements that are taught to be

essential in the prior art for such a person to have a reasonable expectation of success in developing the claimed methods. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

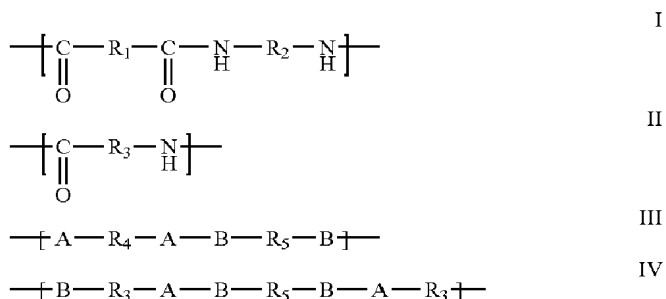
To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Fujita teaches that the additive is a combination of a polyalkene oxide-added secondary alkylamine of the formula:



and a polyalkene oxide-added tertiary alkylamine of the formula:



where the variables are defined and "The concurrent utilization of the two types of polyalkylene oxide-added alkylamines (A) and (B) as below-specified is essential for the polyamide compositions of this invention." The claims do not use a secondary alkylamine and a tertiary amine as an additive but rather use a poly(oxyalkylene)amide or a polymeric matrix comprising poly(oxyalkylene)units. There Fujita does not teach or suggest using a poly(oxyalkylene)amide or a polymeric additive comprising repeat units corresponding to the following general formulae:



There is no also no suggestion or motivation in Fujita to modify the process to feed the filaments into a pneumatic attenuation device in which the filaments can adhere to the wall of the attenuation device or to other filaments. Therefore, the prior art reference does not teach or suggest all the claim limitations.

Applicants respectfully submit that these claims are not obvious over Fujita, and that claims 16-18 are allowable. Applicant therefore requests that this rejection be withdrawn.

2. Claims 19, 20 and 22-30 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Fujita et al. (US 3,755,249) as applied to claim 16 above and further in view of La Grande et al. (US 2004/0242788).

Applicants respectfully submit that these claims are not obvious over Fujita in view of La Grande, and that claims 19, 20 and 22-30 are allowable.

The teachings of Fujita have been described above.

La Grande relates to a thermoplastic polymer comprising at least one polyalkylene oxide block and its application in the field of yarns, fibres and filaments. The processes used in La Grande produce yarns by standard spinning processes, where spinning filaments are combined to produce a yarn before they are eventually

drawn. [0153], [0154]. The filaments are yarns are formed on a bobbin. La Grande does not disclose forming the filaments into sheets just after the spinnerets by feeding the filaments to a pneumatic attenuation device and a stage in which the filaments obtained are formed into a sheet. As disclosed in the specification of the instant application, the effect of the electrostatic charges need to be overcome very quickly and the polymer must have a high electric conductivity to rapidly decrease the electrostatic charges. (page 3, line 21 - page 4, line 5)

Claims 19, 20 and 22-30 depend from claim 16, which is not obvious over Fujita as discussed above.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Fujita or La Grande to modify Fujita to obtain the methods of the applicants' invention. There is no suggestion or motivation in Fujita or La Grande to modify Fujita by replacing an additive comprising the specific secondary alkylamines and the specific tertiary amines as an additive with a poly(oxyalkylene)amide or a polymeric matrix comprising poly(oxyalkylene)units, as required by the instant claims. In addition, there is no suggestion or motivation in either of the cited prior art references to manufacture a non-woven surface directly by spinning the polymer into continuous filaments and forming a sheet. Neither of the cited prior art references describe the process of feeding the filaments into a pneumatic attenuation device in which the filaments can adhere to the wall of the attenuation device or to other filaments. Therefore, there is no suggestion or motivation, either in the cited reference itself or

in the knowledge generally available to one of ordinary skill in the art, to modify the reference to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. The deficiencies of the teachings of Fujita were discussed above. La Grande does not overcome these deficiencies. In addition, there was not a reasonable expectation of success that the combination of Fujita and La Grande would produce the claimed method, as one of ordinary skill in the art, upon reading these references, would not have ascertained that the compositions used in the instant claims have an electrical conductivity suitable to discharge the electric charge as taught above in the specification. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teachings of La Grande do not overcome the deficiencies of Fujita noted in the rejection of claims 16-18, as discussed above. Therefore, the prior art references do not teach or suggest all the claim limitations.

Applicants respectfully submit that these claims are not obvious over Fujita in view of La Grande, and that claims 19, 20 and 22-30 are allowable. Applicant therefore requests that this rejection be withdrawn.

3. Claim 21 has been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Fujita et al. (US 3,755,249) in view of La Grande et al. (US 2004/0242788) as applied to claim 20 and further in view of Glück (US 5,959,069).

Applicants respectfully submit that claim 21 is not obvious over Fujita in view of La Grande and further in view of Glück and that claim 21 is allowable.

The teachings of Fujita and La Grande have been described above.

Glück relates to H-shaped polymers.

Claim 21 depends from claim 16, which is not obvious over Fujita and La Grande as discussed above.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in the cited prior art to modify Fujita to obtain the methods of the applicants' invention. The deficiencies of Fujita and La Grande were discussed above. Glück does not overcome these deficiencies. Therefore, there is no suggestion or motivation, either in the cited reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. The deficiencies of the teachings of Fujita and La Grande are discussed above. Glück does not overcome these deficiencies. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The

teachings of Glück do not overcome the deficiencies of Fujita and La Grande.

Therefore, the prior art references do not teach or suggest all the claim limitations.

Applicants respectfully submit that claim 21 is not obvious over Fujita in view of La Grande and Glück, and that claim 21 is allowable. Applicant therefore requests that this rejection be withdrawn.

From the foregoing, Applicants earnestly solicit further and favorable action in the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general, Applicants invite the Examiner to telephone the undersigned at the Examiner's earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: June 20, 2011

By: /Gary D. Mangels, Ph.D./
Gary D. Mangels, Ph.D.
Registration No. 55424

Customer No. 21839
703 836 6620